

PROJECT PURPOSE / INNOVATION

Halifax County Schools and its three (3) primary partners will engage in highly interactive team communications, sustained collaborations, and digital networking activities using *cutting edge* telecommunication technologies, specialized equipment, and the Internet to reduce the dropout rate, improve academic achievement, and increase the number of diplomas and GEDs in economically depressed areas of North and South Carolina. Project *Cutting Edge (Edge)* will: 1) generate data and best practices from *e-learning*, *networking* and *drop out reduction* that can easily be replicated in other districts, 2) establish a continuous system of communication between four major educational institutions (college and secondary schools), and 3) institute sustaining technologies and ancillary equipment that will provide continuous access for low-income, rural communities and have public secondary uses. Information sharing will be enhanced between inter-state colleagues with similar dropout problems seeking solutions and ideas from those who've ***significantly improved*** rates around the state. NC DPI reports that 98,212 students dropped out of NC schools during the two-year period from 1998 and 1999. Statistics from the dropout prevention web site state that "high school graduates, earn \$6,415 more per year than high school dropouts" (Bureau of Census, 1994) and that "students from low-income families are 10.5 times more likely to drop out than students from high income families" (NCES, 1993). Finally, "82% of America's prisoners are high school dropouts" (Demographics of school reform, 1990). Halifax and Franklin drop out rates exceed the state for 7th - 12th and 9th - 12th grades in 1998 and 1999 and demonstrate annual increase. Chart extrapolated from NC

Public Schools

	1998-99 7-12 Dropouts		1999-00 7-12 Dropouts		1998-99 9-12 Dropouts		1999-00 9-12 Dropouts	
	#	rate	#	rate	#	rate	#	rate
<i>North Carolina</i>		4.60		4.24		6.78		6.43

Halifax	98	3.58	138	5.01	98	5.31	133	7.27
Franklin	159	4.94	207	6.12	145	7.25	188	8.85

The Cyber-Campus at Halifax County Schools is the product of an earlier TOP grant to the *North Carolina School of Math and Science* in Durham. Its broadcast and telecommunication facilities coupled with those at the Technology Center at St. Augustine's University will offer participants a specialized, interactive curriculum in three remote and distant sites to obtain GED, re-refresher courses for re-entry, and diplomas. Using video and telecommunications networks, and *community-supported* on-line services, 9th – 12th graders will work toward re-entry, course credits, and course enrollment offered through approved credit courses designed by local K-12 teachers and college faculty. Each of the three school sites (Charleston County Schools (CCS), Halifax County Schools (HCS), and Franklin County Schools (FCS)) will engage the curriculum content through simultaneous broadcasts on T1 lines using the NC Super Highway (NCREN), Blackboard (on-line course management *offered by St. Augustine*), ISDN Internet provider, and technical support from NC Regional Educational Network Coordinators. Sites will use three distinct means of data access: group setting using standard telecommunications, group setting using Blackboard (Internet), and individual access by notebook computer. Multiple modules will offer real time interactions to expand capabilities for e-learning across the curriculum. Daily courses and Saturdays in live, structured environments will engage students in varying educational projects. The National Dropout Prevention Center/ Network states that "technology offers some of the best opportunity for delivering instruction ...and adapts to students' learning styles," (NDPC/N: see appendix 12: Sources). Approximately 300 dropouts will be targeted for project participation, yet many indirect beneficiaries (other 'at risk' students and their families) will benefit from new technologies. Using computer loan systems and other means, students will also engage parents and siblings in computer skill building.

Initial plans, designs, and needs assessment meetings of the *Edge* development team revealed the technology needs of partnering sites to become active project participants. For example, FCS has no teleconferencing capabilities and seeks computer assisted instructional venues such as NovaNet. Approximately 16 of the 38 computers in the HCS Cyber-lab are not Internet accessible. Grant funds will meet these and other needs. In project Phase1, bi-monthly partner activities are scheduled using conventional meetings, e-meetings, web conferencing, and on-line training to build infrastructure and curriculum development. Phase 2 offers the course and its incentives to screened and identified dropouts. Phase 3 is dissemination, follow-up, and a comprehensive evaluation (see 5-Year Plan: appendix 6). *Edge* offers incentives that will attract students (end users) parents and teaching faculty. A matrix model (appendix 1) outlines outputs, activities, and outcomes for stakeholders. For example, outcomes for students are technology proficiencies, GEDs, elective credits, and diplomas; for school districts, assistance in reaching National Educational Goals; for communities, crime reduction. Efforts are underway to offer CEU credits toward technology renewal and Bush Foundation staff development for teachers.

Project *Edge* is needed. ***Site 1: Halifax County School*** (HCS) (7,000 students) is located in an ***Enterprise Community, rural designee***. Many schools in surrounding districts are state identified as “low-performing.” Unemployment, violence, lack of education among adults (parents), and poverty levels exceed state rates. (see ***Appendix 9***: AP article on the disproportionate number of homes still utilizing *outhouses*). Students have no museums, no immediate access to 4-year colleges, and few cultural arts and recreational outlets in these rural isolated communities where cotton fields blanket the area. Schools are culturally diverse with high concentrations of Native Americans, African Americans, and Hispanics, ranging from 80 – 98%. Technology is non-existent in many homes. Students dropout at early ages due to low-aspiration,

low achievement, and low self-esteem. Recent news articles report school fears that students are failing 8th grade computer competencies). *Edge* is a result of planning meetings among local professionals, educators, technology companies, students, partners, and school districts reaching outside of the community. *Site 2: Charleston County Schools* (South Carolina), *Enterprising Community*. District reports indicate high numbers of students exhibiting drop out profiles (absenteeism, low-achievement). *Site 3: Franklin County Schools* is similar in size/need to HCS, and has one of the highest dropout rates in NC, exceeding state rates and over 97% of the other districts.

Project **Highlights:** The participation of CCS (400 miles from Halifax) demonstrates *distance learning* and the ease of deployment and *replication* regardless of site locale. Because three principally different means of access are being used, multiple levels of study and reports can be generated from data— overall project success and result variations of service delivery. There are *prevention* programs for ‘at risk,’ and suspended /expelled students, yet few for *dropouts*. Over the next three (3) years, *Cutting Edge* will chart a ‘new course’ for dropout programming in national studies. **Objectives:** By May 2004, (1) a 50% ***reduction in target area drop out rates*** is expected as measured by district attendance reports, retention statistics, graduation rates, and *comparison* of non-participant peer groups. (2) an effective ***digital networking system*** will be established in three areas of pervasive poverty to: a) effectively increase prevention efforts by 50% *among educators and administrators using technology*, and b) establish connectivity *among 300 dropouts to an educational system*, and (3) a 30% increase in computer/technology ***access and*** usage among families of ***underserved populations***.

Strong inter-agency partnerships are identified, offering in-kind commitments (see appendix 4 chart), and assisting in sustainability. Contributions range from tee shirts to computer

equipment—cash to cables. Partnerships also reflect the diverse community such as Arrow Educational Products, Inc. representing the Native American population (see appendix 27 letter). Follow-up over time will reveal insights into technology use with dropout education; the model will help establish a knowledge base, determining ‘what works,’ learned lessons, and *best practices* for replications. *Edge* is a front-runner in establishing a baseline for serving dropouts using e-learning and digital technologies. Use of technology itself is innovative for the multitude of students and families in Halifax County or others without telephones in the home.

Communities nationwide are searching for answers to the dropout dilemma. The National Center for Educational Statistics reports that over 500,000 10-12th grade students (not including 7 – 9th) dropped out of school in 1999. The *Edge* model is scalable and can be replicated nationwide to underserved communities. In the project’s inception, ***uniform means of data collection*** will be addressed. Data will be refined and presented annually at regional and national conferences such as the NC Electronic and Information Technologies Association or the Annual National Dropout Prevention Network Conference. *Edge* meets the national education agenda: *Goal #2... the high school graduation rate will increase to at least 90 percent.*

DIFFUSION Outcomes, publications, and findings will be shared with TOP peers and others throughout the educational community at the state, regional, and national levels. Federal funding as well as in-kind contributions will be used to showcase outcomes with up-to-date web sites and links to similar programs; partner panels presenting at conferences, electronic newsletters, and journal articles detailing benchmarks, milestones, *ups/downs*, and 5 year plans.

Imagine students who drop out to work to help maintain the family, teen parents, the expelled student who quits, students who do not excel in classroom environments, students who lack sufficient graduation credits and do not return, or those who simply leave, having no

motivation to complete high school. Project *Cutting Edge* offers a second chance. Its development team believes that hands-on technologies, vast Internet resources, incentives, and a focused partnership team will be attractive; thereby enabling diplomas and GED attainment benefiting hundreds of North and South Carolina students during the 3 year project and beyond.

Partnering agencies are willing to offer technology and other commitments to achieve success. *Edge* funding is based on an assessment of site and community needs and for educational partners as they engage web conferencing and digital links to communicate. Partner in-kind commitments and innovative approaches are key to meeting costs. *In-kind* and *federal budget plans* support travel and publications to disseminate outcomes, follow-up data, *lessons learned*, and methodology. One business, for example, offers a \$2,000 unrestricted cash contribution that can be earmarked for this purpose. **FEASIBILITY** Technology business partners, MCNC and NC REN systems analysts will provide technical assistance for service. Each site will use *existing facilities* in building a facility and network. St. Augustine's University technology specialists will be instrumental in assisting districts upfit for receptivity. A director experienced in federal project management, educational programs, technology, and diverse populations will provide leadership and stay abreast of federal regulations. All professional positions require a BA degree (MA preferred) with considerable experience. Consideration must be given to recruitment efforts in isolated, rural communities. All staff must meet minimal technology proficiencies and participate in additional training in technology, diversity, TOP mission, and evaluation criteria (see appendix 7 for job descriptions). Associate Superintendent Carolyn Johnson (HCS), finance officers, *technology specialists*, and curriculum specialists will provide management responsibility, assuring timelines are met and budgets are within specifications. Superintendent, Dr. Willie J. Gilchrist (HCS) and Dr. Beverly Downing,

Education Chair at St. Augustine's offer particular interest and hands-on approach to the project as it has inter-state and national implications. The budget reflects needs of three (3) public school districts in high poverty areas across two states that are working to infuse and build technology communications into their systems to share resources. Costs are reasonable. For example, NC and SC state per diems rates guide travel.); volunteer hours are calculated by minimum wages; and the federal sum is *highly supported* by local contributions. Partners' responsibilities are defined and include helping to sustain the project by advertising successes, disseminating publications, building facilities and communication systems of permanency. Communities, end users and indirect beneficiaries will benefit in terms of prevention and degree attainment. TOP compliance reports and records (participant files and administrative) will be confidential and secured in locking file cabinets. Encoded data will help protect minors and end user identity. Files are subject to review only by appropriate personnel. Expenditures will follow *state protocols* for financial accountability set by HCS. **COMMUNITY INVOLVED** *Edge* development team members (appendix10 list) range from a 10th grade student to Ph.D. chairs of college departments. Each of four (4) primary partners and twenty-five (25) supporters provided commitment letters. Each describes services and contributions reflecting a high level of commitment. Each has agreed to time commitments for planning, services, building infrastructure, self-assessment, and feedback. For example, St. Augustine's offers a summer residential week of *technology proficiency development* for faculty and *Edge teachers*; the Developmental Educational Center will recommend *assistive* technology for persons with disabilities (see appendix 11: equal access for hiring/service). Input from students and parents will continue to be useful as the project considers the cultural, economic, and other socio-demographics of families and end users in planning and design. As an *evolving entity*, *Edge's*

participants, end users, staff, and partners will be continually improving and upgrading technology skills through courses, workshops, summits, forums, conferences, and periodic training through TOP facilities and opportunities. *Edge* participants and parents will be involved in a series of training seminars to develop family computer proficiencies and literacy.

EVALUATION Because of its significance, evaluation is more *detailed* in appendix 1-3.

Groundwork is underway. Harris Interactive (HI), (Rochester NY—Harris Poll distributor) has agreed to serve as the outside evaluator. HI is “the market leader in educational market research” and used by many districts nationwide. Coupled with local technology (systems) specialists, parents, students, TOP *peers*, and *a volunteer assessment team* (see appendix 3 for qualifications), evaluators will use standard research designs encompassing data collection methods (e.g., case study, observations, interviews) and statistical analyses (e.g., t-test and Chi Square) to assess the project *quantitatively* and *qualitatively* (see appendix 2 examples).

Instrumentation includes surveys such as Global Assessment: Teacher Survey and CSMpact for Schools. HI will assure *uniform means of data collection* systems and strategies and means for cleaning data—such as duplicate counting of participants and/or accounting for service delivery variations. *Evaluative criteria for periodic review and annual reporting will be shared with constituents.* Criteria will be periodically re-examined to assure continued appropriateness to the objectives. Feed back from all assessment types (surveys, interview, and observations) will be used to improve project design and analyze cost effectiveness. A matrix of ‘inputs/ activities/ outcomes’ is in appendix 1. Funding is allocated for an outside evaluation and also includes hardware and systems analysis for maintenance, wiring, or repair. A comprehensive/ summative evaluation is planned within 5 years and will address questions such as: *Has the dropout rate significantly changed in target sites? Were there different outcomes for each site? What were*

unanticipated outcomes? Did Edge students show different persistence, re-entry and achievement levels compared to students without intervention services?